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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/417,428	10/13/1999	DANIEL F. LYMAN	1923-48641	7415
21874	7590	06/07/2006	EXAMINER	
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			RICCI, JOHN A	
			ART UNIT	PAPER NUMBER

3711

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/417,428

Applicant(s)

LYMAN, DANIEL F.

Examiner

John Ricci

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-12 is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 7,13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 & 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Jorgensen et al 3,414,186.

Jorgensen shows a device (32 or 38) including a planar peripheral portion, and a flexible center portion having an upper surface and a lower surface; the center portion having two stable equilibrium positions (column 3, line 9), wherein in the first stable position, the lower surface has a concave shape, and the upper surface has a convex shape (figure 1); and in the second stable position, the lower surface has a convex shape, and the upper portion has a concave shape (figure 2). As water pressure bears against the upper surface of diaphragm 32, it is gradually forced downward. At some point, the system of 32, 34, 36, 38 snaps down to the position shown in figure 2 (column 3, lines 27-42). Jorgensen suggests that the diaphragms snap abruptly

when enough pressure is applied, rather than move in linear response to applied pressure, suggesting that at least one diaphragm 32, 38 is not planar, but normally has a concave surface that snaps to convex when pushed slightly overcenter. Although Jorgensen shows the device installed as part as a pump, it would be possible to hold and manipulate the device in a hand; for example, the device was likely held in a hand as the pump was being assembled. Although Jorgensen does not state in the specification what material the flexible device is made of, the drawings show the cross section of material with thick section lines, suggesting the material is likely polymeric. With regard to claim 17, the material would inherently have some color.

Claims 2-6, 8, 9, & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen et al.

With regard to claims 2-6 & 8, it appears that the flexible device shown by Jorgensen would have approximately these dimensions, and the pump would be operable with these dimensions; where the general conditions of a claim are

disclosed in the prior art, discovering working optimum ranges involves only routine skill. *In re Aller*, 105 USPQ 233.

With regard to claims 9 & 16, making the device of the particular polymeric material claimed would be obvious, since it is considered within the skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

\* \* \* \* \*

Claims 10-12 are allowed.

Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

\* \* \* \* \*

Applicant's arguments filed 2/28/06 have been fully considered but they are not persuasive. The rejection is more fully explained above.

\* \* \* \* \*

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

\* \* \* \* \*

This letter was prepared by Examiner John Ricci, who can be reached at:

Voice: 571-272-4429

Fax: Use 571-273-8300 for papers to be delivered directly to the mail room, like formal amendments and responses, change of address, power of attorney, petitions.

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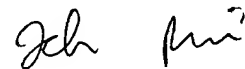
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Use 703-783-0439 for papers to be delivered directly to the Examiner, like informal or proposed responses for discussion, or notes in preparation for an interview.

*Response by Fax is encouraged to reduce mail processing time. Please don't send duplicate papers by mail and Fax.*

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**JOHN RICCI  
PRIMARY EXAMINER  
ART UNIT 3711**